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 Biotechnol Bioeng. 2003 Jul 20;83(2):168-72.
 PMID: 12768622 [PubMed - indexed for MEDLINE]

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- ☐ **2:** [Kwak SY, Kim SH, Kim SS.](#) [Related Articles, Links](#)
- ☐ **Hybrid organic/inorganic reverse osmosis (RO) membrane for bactericidal anti-fouling. 1. Preparation and characterization of TiO2 nanoparticle self-assembled aromatic polyamide thin-film-composite (TFC) membrane.**
 Environ Sci Technol. 2001 Jun 1;35(11):2388-94.
 PMID: 11414050 [PubMed - indexed for MEDLINE]

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- ☐ **Potential of an antibacterial ultraviolet-irradiated nylon film.**
 Biotechnol Bioeng. 2000 Jan 20;67(2):141-6.
 PMID: 10592511 [PubMed - indexed for MEDLINE]





















- ☐ **4:** [Adams AP, Santschi EM, Mellencamp MA.](#) [Related Articles, Links](#)
- ☐ **Antibacterial properties of a silver chloride-coated nylon wound dressing.**
 Vet Surg. 1999 Jul-Aug;28(4):219-25.
 PMID: 10424701 [PubMed - indexed for MEDLINE]

- ☐ **5:** [Volenko AV, Germanovich ChS, Gurova OP, Shvets RA.](#) [Related Articles, Links](#)
- ☐ **[Kapromed - antibacterial suture material]**
 Med Tekh. 1994 Mar-Apr;(2):32-4. Russian.
 PMID: 8208101 [PubMed - indexed for MEDLINE]

- ☐ **6:** [Aleksandrov KR, Volenko AV, Vasina TA, Sidorova IV.](#) [Related Articles, Links](#)
- ☐ **[Prolonged antibacterial action of polymer coated suture materials]**
 Antibiot Khimioter. 1991 Nov;36(11):37-40. Russian.
 PMID: 1793296 [PubMed - indexed for MEDLINE]

- ☐ **7:** [Polous IuM, Dobrorodnii VB, Belykh SI.](#) [Related Articles, Links](#)
- ☐ **[Use of the "Capromed DQ" thread for closure of the anterior abdominal wall defect during operations for postoperative recurrent ventral hernia]**
 Klin Khir. 1991;(3):48-9. Russian.
 PMID: 1829777 [PubMed - indexed for MEDLINE]

- ☐ **8:** [Singhal JP, Singh J, Ray AR, Singh H.](#) [Related Articles, Links](#)
- ☐ **Antibacterial multifilament nylon sutures.**
 Biomater Artif Cells Immobilization Biotechnol. 1991;19(3):631-48.
 PMID: 1760495 [PubMed - indexed for MEDLINE]

-  **9:** [Polous IuM, Malevanyi VV, Vikaliuk IuF, Belykh SI.](#) [Related Articles, Links](#)
 [Antibacterial threads in surgery of the lungs]
Vestn Khir Im I I Grek. 1989 May;142(5):10-2. Russian.
PMID: 2800190 [PubMed - indexed for MEDLINE]
-  **10:** [Polous IuM, Dobrorodnii VB, Vikaliuk IuF, Belykh SI.](#) [Related Articles, Links](#)
 [Antibacterial sutures "Capromed DQ" in abdominal surgery]
Klin Khir. 1989;(1):13-5. Russian.
PMID: 2739243 [PubMed - indexed for MEDLINE]
-  **11:** [Chu CC, Tsai WC, Yao JY, Chiu SS.](#) [Related Articles, Links](#)
 Newly made antibacterial braided nylon sutures. I. In vitro qualitative and in vivo preliminary biocompatibility study.
J Biomed Mater Res. 1987 Nov;21(11):1281-300.
PMID: 3316233 [PubMed - indexed for MEDLINE]
-  **12:** [Tsai WC, Chu CC, Chiu SS, Yao JY.](#) [Related Articles, Links](#)
 In vitro quantitative study of newly made antibacterial braided nylon sutures.
Surg Gynecol Obstet. 1987 Sep;165(3):207-11.
PMID: 3114898 [PubMed - indexed for MEDLINE]
-  **13:** [MacKeen PC, Person S, Warner SC, Snipes W, Stevens SE Jr.](#) [Related Articles, Links](#)
 Silver-coated nylon fiber as an antibacterial agent.
Antimicrob Agents Chemother. 1987 Jan;31(1):93-9.
PMID: 3105444 [PubMed - indexed for MEDLINE]
-  **14:** [Arsov T, Tankov I, Savchev S, Ivanchev P.](#) [Related Articles, Links](#)
 [Use of Bulgarian antibacterial polyamide mesh and antibacterial sutures in our own practice]
Khirurgiia (Sofia). 1985;38(2):45-6. Bulgarian. No abstract available.
PMID: 3892145 [PubMed - indexed for MEDLINE]
-  **15:** [Bucknall TE.](#) [Related Articles, Links](#)
 Wound healing in abdominal operations.
Surg Annu. 1985;17:1-22. Review.
PMID: 3883538 [PubMed - indexed for MEDLINE]
-  **16:** [Osterberg B.](#) [Related Articles, Links](#)
 Influence of capillary multifilament sutures on the antibacterial action of inflammatory cells in infected wounds.
Acta Chir Scand. 1983;149(8):751-7.
PMID: 6364664 [PubMed - indexed for MEDLINE]
-  **17:** [Chetrafilov D, Mirev K, Ivanov I.](#) [Related Articles, Links](#)
 [Our experience in using Bulgarian antibacterial polyamide sheeting in surgical practice]
Khirurgiia (Sofia). 1983;36(6):544-7. Russian. No abstract available.
PMID: 6230483 [PubMed - indexed for MEDLINE]
-  **18:** [Carroll SF, Martinez RJ.](#) [Related Articles, Links](#)
 Antibacterial peptide from normal rabbit serum. 2. Compositional microanalysis.
Biochemistry. 1981 Oct 13;20(21):5981-7.
PMID: 7306487 [PubMed - indexed for MEDLINE]

☐ 19: [Becker RO, Spadaro JA.](#)

[Related Articles, Links](#)



Treatment of orthopaedic infections with electrically generated silver ions. A preliminary report.

J Bone Joint Surg Am. 1978 Oct;60(7):871-81.

PMID: 701335 [PubMed - indexed for MEDLINE]

☐ 20: [Hughes DE, Pugh GW Jr.](#)

[Related Articles, Links](#)



Infectious bovine keratoconjunctivitis: a ring device designed for prolonged retention in the bovine eye.

Am J Vet Res. 1975 Jul;36(7):1043-5.

PMID: 1147348 [PubMed - indexed for MEDLINE]

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L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:833522 CAPLUS

DOCUMENT NUMBER: 133:363744

TITLE: Antibacterial finishing meta-aromatic
polyamide fibers with washfast
antibacterial properties by treating
meta-aramid fibers containing alkylbenzenesulfonic
acid onium salts with nitrogen-containing bactericides

INVENTOR(S): Tachioka, Yasunori; Suzuki, Motoyoshi

PATENT ASSIGNEE(S): Teijin Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2000328450	A2	20001128	JP 1999-135643	19990517
PRIORITY APPLN. INFO.:			JP 1999-135643	19990517
OTHER SOURCE(S):	MARPAT 133:363744			
TI	Antibacterial finishing meta-aromatic polyamide fibers with washfast antibacterial properties by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides			
ST	aramid fiber antibacterial fire resistant washfastness; meta aramid fiber antibacterial fire resistant washfastness; quaternary ammonium compd antibacterial finish meta aramid fiber; phosphoric acid ester fireproofing agent meta aramid fiber; household interior material antibacterial fire resistant fabric; bedding antibacterial fire resistant fabric; clothing antibacterial fire resistant fabric			
IT	Antibacterial agents Fire-resistant materials (antibacterial finishing meta-aromatic polyamide fibers with washfast antibacterial properties by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides)			
IT	Quaternary ammonium compounds, uses RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (antibacterial finishing meta-aromatic polyamide fibers with washfast antibacterial properties by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides)			
IT	Clothing (antibacterial finishing meta-aromatic polyamide fibers with washfast antibacterial properties by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides for)			
IT	Polyamide fibers , uses RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (aramid; antibacterial finishing meta-aromatic polyamide fibers with washfast antibacterial properties by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides)			
IT	Household furnishings			

- (bedding; antibacterial finishing meta-aromatic **polyamide fibers** with washfast **antibacterial properties** by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides for)
- IT Dyeing
(cationic; antibacterial finishing meta-aromatic **polyamide fibers** with washfast **antibacterial properties** by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides)
- IT Household furnishings
(interior materials; antibacterial finishing meta-aromatic **polyamide fibers** with washfast **antibacterial properties** by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides for)
- IT **Polyamide fibers, uses**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(isophthalic acid-m-phenylenediamine; antibacterial finishing meta-aromatic **polyamide fibers** with washfast **antibacterial properties** by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides)
- IT Fireproofing agents
(phosphoric acid esters; antibacterial finishing meta-aromatic **polyamide fibers** with washfast **antibacterial properties** by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides)
- IT 111503-99-2, Tetrabutylphosphonium dodecylbenzenesulfonate
RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(antibacterial finishing meta-aromatic **polyamide fibers** with washfast **antibacterial properties** by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides)
- IT 148-79-8, Thiabendazole 719-96-0, Preventol A 3 67383-11-3, Mergal BCM 143476-98-6, Nikkanon RB
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(bactericide; antibacterial finishing meta-aromatic **polyamide fibers** with washfast **antibacterial properties** by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides)
- IT 24938-60-1, Poly(m-phenyleneisophthalamide) 25035-33-0, Poly(m-phenyleneisophthalamide)
RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(fiber; antibacterial finishing meta-aromatic **polyamide fibers** with washfast **antibacterial properties** by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides)
- IT 252642-20-9, CR 387
RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(fireproofing agent; antibacterial finishing meta-aromatic **polyamide fibers** with washfast **antibacterial properties** by treating meta-aramid fibers containing alkylbenzenesulfonic acid onium salts with nitrogen-containing bactericides)

TITLE: Manufacture of antibacterial fiber with good durability and washfastness using no metal chelates
 INVENTOR(S): Yoshibe, Fumihisa; Hayashi, Kazuhiko; Higashihata, Hiroshi
 PATENT ASSIGNEE(S): Itoen K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000096433	A2	20000404	JP 1998-267846	19980922
JP 3188871	B2	20010716		

PRIORITY APPLN. INFO.: JP 1998-267846 19980922

AB The process comprises (a) soaking fibers in an aqueous solution containing **quaternary ammonium** salt cationic surfactant, water-soluble protein, and alkali compound and (b) separating the fibers from the aqueous solution and soaking in an aqueous solution containing tea polyphenols. Soaking a cotton towel in a solution containing NaOH 25, cationic agent (containing protein) 100, and water 3000 g at 80° for 30 min, dewatering the towel, soaking in an aqueous solution containing 90 g Theaflan 30A (polyphenol content 40%) and 3000 g water at 80° for 5 min, soaking in a solution containing 30 g tartaric acid and 300 mL water, dewatering and drying gave a green tea polyphenol-dyed towel.

IT Acetate fibers, properties
Polyamide fibers, properties
 Polyester fibers, properties
 Polypropene fibers, properties
 Polyurethane fibers
 Rayon, properties
 Vinyon fibers

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
 (manufacture of **antibacterial** fiber with good durability and washfastness using no metal chelates)

IT **Quaternary ammonium** compounds, uses

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (manufacture of antibacterial fiber with good durability and washfastness using no metal chelates)

IT **Phenols**, uses

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); BIOL (Biological study); PROC (Process); USES (Uses)
 (polyphenols, nonpolymeric; manufacture of antibacterial fiber with good durability and washfastness using no metal chelates)

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1988:494682 CAPLUS

DOCUMENT NUMBER: 109:94682

TITLE: Dyeing of **polyamide fibers** with built-in **antibacterial properties**

INVENTOR(S): Tajiri, Koji; Yamahara, Yukio

PATENT ASSIGNEE(S): Teijin Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63050575	A2	19880303	JP 1986-194063	19860821
JP 05009546	B4	19930205		

PRIORITY APPLN. INFO.: JP 1986-194063 19860821

OTHER SOURCE(S): MARPAT 109:94682

TI Dyeing of **polyamide fibers** with built-in **antibacterial properties**

AB In the dyeing of **polyamide fibers** coated with silyl group-containing **quaternary ammonium** salt antibacterial agents, retention of **antibacterial properties** is improved if the fibers are first dyed with acidic dye solns. and then treated with alkaline solns. Thus, nylon 6 was melt spun, coated with a lubricant containing 0.6% [3-(trimethoxysilyl)propyl]dimethyloctadecylammonium chloride, and drawn to draw ratio 30. A knit of the yarns was then dyed with an aqueous composition containing Tectilon Yellow 4R 0.08, Tectilon Red

HRLL 0.014, and Tectilon Blue 6G 0.1015% (on fiber) at pH 6 and treated with a solution at pH 8 for 30 min at 98° to give a dyed knit with retention of **antibacterial properties** 100%, vs. 1.2% for the dyed knit not treated with the alkaline solution

IT Dyeing
(of built-in antibacterial **polyamide fibers**,
aftertreatment with alkali solns. for improved retention of
antibacterial properties)

IT Bactericides, Disinfectants, and Antiseptics
(silyl group-containing **quaternary ammonium** compds.,
polyamide fibers coated with, dyeing fastness improvement of)

IT **Quaternary ammonium** compounds, uses and miscellaneous
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
((alkoxysilylalkyl)trialkyl, bactericides, nylon fibers coated with,
dyeing fastness improvement of)

IT **Quaternary ammonium** compounds, uses and miscellaneous
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(silyl, bactericides, nylon fibers coated with, dyeing fastness improvement of)

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1985:8207 CAPLUS

DOCUMENT NUMBER: 102:8207

TITLE: Manufacture of antibacterial polyamide fiber and their blends

PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59112070	A2	19840628	JP 1982-217737	19821214
JP 03075664	B4	19911202		

PRIORITY APPLN. INFO.:

JP 1982-217737

19821214

AB **Polyamide fibers** and their blends are treated with mixts. containing an anionic **phenol** compound (I) and an antibacterial agent (II) or first treated with II and then treated with I to give fabrics having washfast **antibacterial properties**. These fabrics are useful for sportswear, socks, and pantyhose. Thus, dyed nylon 66 jersey was treated with a dispersion containing 5-chloro-2-(2,4-dichlorophenoxy)**phenol** [3380-34-5] and Hifix GM [89338-67-0] (anionic **phenol** compound). The treated fabric showed good **antibacterial properties** even after 20 washings.

ST antibacterial polyamide fiber; anionic **phenol** compd polyamide treatment; washfastness antibacterial polyamide fiber; nylon fiber antibacterial washfast; chlorodichlorophenoxyphenol antibacterial agent; sportswear nylon antibacterial; sock nylon antibacterial; pantyhose nylon antibacterial

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L1 267 SEA ABB=ON PLU=ON POLYAMIDE (3A) FIBER (P) ANTIBACTERIAL
L2 0 SEA ABB=ON PLU=ON L1 AND BUCHENSKA
L3 46 SEA ABB=ON PLU=ON POLYAMIDE (3A) FIBER (P) ANTIBACTERIAL
(3A) PROPERTIES
L4 4 SEA ABB=ON PLU=ON L3 AND (QUATERNARY AMMONIUM OR IODINE OR
TRICLOSAN OR GENTIAN VOILET OR PHENOL OR BIGUANIDINE)
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<input type="checkbox"/>	L15	514/772.ccls.	792
<input type="checkbox"/>	L14	424/78.06.ccls.	284
<input type="checkbox"/>	L13	424/78.37.ccls.	294
<input type="checkbox"/>	L12	antimicrobial adj2 composition same (triclosan or quaternary adj ammonium or gentian violet or phenol or iodine or biguanidine or antibiotic) same amide adj3 polymer	0
<input type="checkbox"/>	L11	antimicrobial adj2 composition same (triclosan or quaternary adj ammonium or gentian violet or phenol or iodine or biguanidine or antibiotic) same polyamide	3
<input type="checkbox"/>	L10	antimicrobial adj2 composition same polymeriz\$ adj5 (triclosan or quaternary adj ammonium or gentian violet or phenol or iodine or biguanidine)	2
<input type="checkbox"/>	L9	polymeriz\$ adj5 (triclosan or quaternary adj ammonium or gentian violet or phenol or iodine or biguanidine)	3431
<input type="checkbox"/>	L8	L7 adj5 (antibiotic or disinfectant or sterilizing or antimicrobial or antibacterial) same composition	2
<input type="checkbox"/>	L7	(amine or peptide or oligopeptide or amide) adj2 polymer	10834
<input type="checkbox"/>	L6	polyamide adj2 polymer	7350
<input type="checkbox"/>	L5	(disinfectant or antimicrobial or antibacterial or sterilizing) same polyamide adj5 (triclosan or quaternary adj ammonium or gentian violet or phenol or iodine or biguanidine)	8
<input type="checkbox"/>	L4	polyamide adj5 (triclosan or quaternary adj ammonium or gentian violet or phenol or iodine or biguanidine)	2391
<input type="checkbox"/>	L3	polyamide adj5 (antimicrobial or anti-bacterail or gentian violet or phenol or iodine or biguanidine)	2285
<input type="checkbox"/>	L2	chakravarthy	179
<input type="checkbox"/>	L1	chakraborty	0

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<input type="checkbox"/>	L16	(L15 or l14 or l13) and (polyamide or polymer adj4 amide) same (antibacterial or disinfectant or sterilization or sterilizing or antimicrobial)	2
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<input type="checkbox"/>	L14	424/78.06.ccls.	284
<input type="checkbox"/>	L13	424/78.37.ccls.	294
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<input type="checkbox"/>	L11	antimicrobial adj2 composition same (triclosan or quaternary adj ammonium or gentian violet or phenol or iodine or biguanidine or antibiotic) same polyamide	3
<input type="checkbox"/>	L10	antimicrobial adj2 composition same polymeriz\$ adj5 (triclosan or quaternary adj ammonium or gentian violet or phenol or iodine or biguanidine)	2
<input type="checkbox"/>	L9	polymeriz\$ adj5 (triclosan or quaternary adj ammonium or gentian violet or phenol or iodine or biguanidine)	3431
<input type="checkbox"/>	L8	L7 adj5 (antibiotic or disinfectant or sterilizing or antimicrobial or antibacterial) same composition	2
<input type="checkbox"/>	L7	(amine or peptide or oligopeptide or amide) adj2 polymer	10834
<input type="checkbox"/>	L6	polyamide adj2 polymer	7350
<input type="checkbox"/>	L5	(disinfectant or antimicrobial or antibacterial or sterilizing) same polyamide adj5 (triclosan or quaternary adj ammonium or gentian violet or phenol or iodine or biguanidine)	8
<input type="checkbox"/>	L4	polyamide adj5 (triclosan or quaternary adj ammonium or gentian violet or phenol or iodine or biguanidine)	2391
<input type="checkbox"/>	L3	polyamide adj5 (antimicrobial or anti-bacterail or gentian violet or phenol or iodine or biguanidine)	2285
<input type="checkbox"/>	L2	chakravarthy	179
<input type="checkbox"/>	L1	chakraborty	0

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FILE COVERS 1907 - 5 Mar 2004 VOL 140 ISS 11

FILE LAST UPDATED: 4 Mar 2004 (20040304/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s (antimicrobial or antibacterial or antibiotic or disinfectant) (p) (peptide or oligopeptide or polymer or protein)

49927 ANTIMICROBIAL

3406 ANTIMICROBIALS

51060 ANTIMICROBIAL

(ANTIMICROBIAL OR ANTIMICROBIALS)

69745 ANTIBACTERIAL

3035 ANTIBACTERIALS

70626 ANTIBACTERIAL

(ANTIBACTERIAL OR ANTIBACTERIALS)

111963 ANTIBIOTIC

98248 ANTIBIOTICS

147546 ANTIBIOTIC

(ANTIBIOTIC OR ANTIBIOTICS)

12685 DISINFECTANT

56779 DISINFECTANTS

61500 DISINFECTANT

(DISINFECTANT OR DISINFECTANTS)

305618 PEPTIDE

222947 PEPTIDES

390764 PEPTIDE

(PEPTIDE OR PEPTIDES)

4080 OLIGOPEPTIDE

5046 OLIGOPEPTIDES

7342 OLIGOPEPTIDE

(OLIGOPEPTIDE OR OLIGOPEPTIDES)

938579 POLYMER

787154 POLYMERS

1277324 POLYMER

(POLYMER OR POLYMERS)

1599026 PROTEIN
1100862 PROTEINS
1852363 PROTEIN

(PROTEIN OR PROTEINS)

L1 31848 (ANTIMICROBIAL OR ANTIBACTERIAL OR ANTIBIOTIC OR DISINFECTANT)
(P) (PEPTIDE OR OLIGOPEPTIDE OR POLYMER OR PROTEIN)

=> s (antimicrobial or antibacterial or antibiotic or disinfectant or phenol or
gentian violet or biguanidine or iodine) (p) (peptide or oligopeptide or polymer or
protein)

49927 ANTIMICROBIAL
3406 ANTIMICROBIALS
51060 ANTIMICROBIAL
(ANTIMICROBIAL OR ANTIMICROBIALS)
69745 ANTIBACTERIAL
3035 ANTIBACTERIALS
70626 ANTIBACTERIAL
(ANTIBACTERIAL OR ANTIBACTERIALS)
111963 ANTIBIOTIC
98248 ANTIBIOTICS
147546 ANTIBIOTIC
(ANTIBIOTIC OR ANTIBIOTICS)
12685 DISINFECTANT
56779 DISINFECTANTS
61500 DISINFECTANT
(DISINFECTANT OR DISINFECTANTS)
224236 PHENOL
104681 PHENOLS
276347 PHENOL
(PHENOL OR PHENOLS)
1699 GENTIAN
16 GENTIAN
1705 GENTIAN
(GENTIAN OR GENTIAN)
17 VOILET
0 GENTIAN VOILET
(GENTIAN(W)VOILET)
272 BIGUANIDINE
37 BIGUANIDINES
291 BIGUANIDINE
(BIGUANIDINE OR BIGUANIDINES)
122811 IODINE
190 IODINES
122882 IODINE
(IODINE OR IODINES)
305618 PEPTIDE
222947 PEPTIDES
390764 PEPTIDE
(PEPTIDE OR PEPTIDES)
4080 OLIGOPEPTIDE
5046 OLIGOPEPTIDES
7342 OLIGOPEPTIDE
(OLIGOPEPTIDE OR OLIGOPEPTIDES)
938579 POLYMER
787154 POLYMERS
1277324 POLYMER
(POLYMER OR POLYMERS)
1599026 PROTEIN
1100862 PROTEINS
1852363 PROTEIN

(PROTEIN OR PROTEINS)

L2 68583 (ANTIMICROBIAL OR ANTIBACTERIAL OR ANTIBIOTIC OR DISINFECTANT

OR PHENOL OR GENTIAN VIOLET OR BIGUANIDINE OR IODINE) (P) (PEPTIDE OR OLIGOPEPTIDE OR POLYMER OR PROTEIN)

=> s (conjugate or crosslinked or cross-linked) (p) (antimicrobial or antibacterial or antibiotic or disinfectant or phenol or gentian violet or biguanidine or iodine) (p) (peptide or oligopeptide or polymer or protein)

0 CONJUGATE
0 CROSSLINKED
430291 CROSS
13922 CROSSES
442316 CROSS
(CROSS OR CROSSES)
210324 LINKED
1 LINKEDS
210324 LINKED
(LINKED OR LINKEDS)
20939 CROSS-LINKED
(CROSS(W) LINKED)
49927 ANTIMICROBIAL
3406 ANTIMICROBIALS
51060 ANTIMICROBIAL
(ANTIMICROBIAL OR ANTIMICROBIALS)
69745 ANTIBACTERIAL
3035 ANTIBACTERIALS
70626 ANTIBACTERIAL
(ANTIBACTERIAL OR ANTIBACTERIALS)
111963 ANTIBIOTIC
98248 ANTIBIOTICS
147546 ANTIBIOTIC
(ANTIBIOTIC OR ANTIBIOTICS)
12685 DISINFECTANT
56779 DISINFECTANTS
61500 DISINFECTANT
(DISINFECTANT OR DISINFECTANTS)
224236 PHENOL
104681 PHENOLS
276347 PHENOL
(PHENOL OR PHENOLS)
1699 GENTIAN
16 GENTIANS
1705 GENTIAN
(GENTIAN OR GENTIANS)
17 VIOLET
0 GENTIAN VIOLET
(GENTIAN(W) VIOLET)
272 BIGUANIDINE
37 BIGUANIDINES
291 BIGUANIDINE
(BIGUANIDINE OR BIGUANIDINES)
122811 IODINE
190 IODINES
122882 IODINE
(IODINE OR IODINES)
305618 PEPTIDE
222947 PEPTIDES
390764 PEPTIDE
(PEPTIDE OR PEPTIDES)
4080 OLIGOPEPTIDE
5046 OLIGOPEPTIDES
7342 OLIGOPEPTIDE
(OLIGOPEPTIDE OR OLIGOPEPTIDES)
938579 POLYMER

787154 POLYMERS
1277324 POLYMER
 (POLYMER OR POLYMERS)
1599026 PROTEIN
1100862 PROTEINS
1852363 PROTEIN

 (PROTEIN OR PROTEINS)
L3 227 (CONJUAGTE OR CONROSSLINKED OR CROSS-LINKED) (P) (ANTIMICROBIAL
 OR ANTIBACTERIAL OR ANTIBIOTIC OR DISINFECTANT OR PHENOL OR
 GENTIAN VOILET OR BIGUANIDINE OR IODINE) (P) (PEPTIDE OR OLIGOPE
 PTIDE OR POLYMER OR PROTEIN)

=> s (conjuagte or conjugated) (p) (crosslinked or cross-linked) (p) (antimicrobial
or antibacterial or antibiotic or disinfectant or phenol or gentian violet or
biguanidine or iodine) (p) (peptide or oligopeptide or polymer or protein)

 0 CONJUAGTE
 88168 CONJUGATED
 88451 CROSSLINKED
 430291 CROSS
 13922 CROSSES
 442316 CROSS
 (CROSS OR CROSSES)
 210324 LINKED
 1 LINKEDS
 210324 LINKED
 (LINKED OR LINKEDS)
 20939 CROSS-LINKED
 (CROSS(W) LINKED)
 49927 ANTIMICROBIAL
 3406 ANTIMICROBIALS
 51060 ANTIMICROBIAL
 (ANTIMICROBIAL OR ANTIMICROBIALS)
 69745 ANTIBACTERIAL
 3035 ANTIBACTERIALS
 70626 ANTIBACTERIAL
 (ANTIBACTERIAL OR ANTIBACTERIALS)
 111963 ANTIBIOTIC
 98248 ANTIBIOTICS
 147546 ANTIBIOTIC
 (ANTIBIOTIC OR ANTIBIOTICS)
 12685 DISINFECTANT
 56779 DISINFECTANTS
 61500 DISINFECTANT
 (DISINFECTANT OR DISINFECTANTS)
 224236 PHENOL
 104681 PHENOLS
 276347 PHENOL
 (PHENOL OR PHENOLS)
 1699 GENTIAN
 16 GENTIAN
 1705 GENTIAN
 (GENTIAN OR GENTIAN)
 17 VOILET
 0 GENTIAN VOILET
 (GENTIAN(W) VOILET)
 272 BIGUANIDINE
 37 BIGUANIDINES
 291 BIGUANIDINE
 (BIGUANIDINE OR BIGUANIDINES)
 122811 IODINE
 190 IODINES
 122882 IODINE

(IODINE OR IODINES)
 305618 PEPTIDE
 222947 PEPTIDES
 390764 PEPTIDE
 (PEPTIDE OR PEPTIDES)
 4080 OLIGOPEPTIDE
 5046 OLIGOPEPTIDES
 7342 OLIGOPEPTIDE
 (OLIGOPEPTIDE OR OLIGOPEPTIDES)
 938579 POLYMER
 787154 POLYMERS
 1277324 POLYMER
 (POLYMER OR POLYMERS)
 1599026 PROTEIN
 1100862 PROTEINS
 1852363 PROTEIN
 (PROTEIN OR PROTEINS)

L4 7 (CONJUGATE OR CONJUGATED) (P) (CROSSLINKED OR CROSS-LINKED) (P)
 (ANTIMICROBIAL OR ANTIBACTERIAL OR ANTIBIOTIC OR DISINFECTANT
 OR PHENOL OR GENTIAN VIOLET OR BIGUANIDINE OR IODINE) (P) (PEPTI
 DE OR OLIGOPEPTIDE OR POLYMER OR PROTEIN)

=> d l4 ibib kwic 1-

YOU HAVE REQUESTED DATA FROM 7 ANSWERS - CONTINUE? Y/(N):y

L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:406886 CAPLUS

DOCUMENT NUMBER: 139:99885

TITLE: Conjugation of Penicillin Acylase with the Reactive
 Copolymer of N-Isopropylacrylamide: A Step Toward a
 Thermosensitive Industrial Biocatalyst

AUTHOR(S): Ivanov, Alexander E.; Edink, Ewald; Kumar, Ashok;
 Galaev, Igor Yu.; Arendsen, Alexander F.; Bruggink,
 Alle; Mattiasson, Bo

CORPORATE SOURCE: Department of Biotechnology Center for Chemistry and
 Chemical Engineering, Lund University, Lund, S-221 00,
 Swed.

SOURCE: Biotechnology Progress (2003), 19(4), 1167-1175

CODEN: BIPRET; ISSN: 8756-7938

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Conjugation of penicillin acylase (PA) to poly-N-isopropylacrylamide
 (polyNIPAM) was studied as a way to prepare a thermosensitive biocatalyst
 for industrial applications to **antibiotic** synthesis.
 Condensation of PA with the copolymer of NIPAM containing active ester groups
 resulted in higher coupling yields of the enzyme (37%) compared to its
 chemical modification and copolymn. with the monomer (9% coupling yield) at
 the same NIPAM:enzyme weight ratio of ca. 35. A 10-fold increase of the
 enzyme loading on the copolymer resulted in 24% coupling yield and
 increased by 4-fold the specific PA activity of the conjugate. Two mol.
 forms of the conjugate were found by gel filtration on Sepharose CL 4B:
 the lower mol. weight fraction of ca. 106 and, presumably, **cross-**
linked protein-polymer aggregates of MW > 107.
 Michaelis constant for 5-nitro-3-phenylacetamidobenzoic acid hydrolysis by
 the PA conjugate (20 µM) was found to be slightly higher than that of
 the free enzyme (12 µM), and evaluation of Vmax testifies to the high
 catalytic efficiency of the **conjugated** enzyme. PolyNIPAM-
cross-linked PA retained its capacity to synthesize
 cephalixin from D-phenylglycinamide and 7-aminodeacetoxycephalosporanic

acid. The synthesis-hydrolysis ratios of free and polyNIPAM-**cross-linked** enzyme in cephalixin synthesis were 7.46 and 7.49, resp. Thus, diffusional limitation, which is a problem in the industrial production of β -lactam **antibiotics**, can be successfully eliminated by crosslinking penicillin acylase to a smart **polymer** (i.e., polyNIPAM).

L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:231739 CAPLUS

DOCUMENT NUMBER: 124:263206

TITLE: Thermoplastic elastomer compositions containing isobutylene-isoprene rubbers or their halides and polyolefins

INVENTOR(S): Mizuno, Yoshihisa; Nakanishi, Hideo; Kamoshita, Yoichi

PATENT ASSIGNEE(S): Japan Synthetic Rubber Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08027314	A2	19960130	JP 1994-183857	19940713
JP 3443958	B2	20030908		

PRIORITY APPLN. INFO.: JP 1994-183857 19940713

AB The title compns. comprise (i) isobutylene-isoprene copolymer rubber and/or their halides 10-90, (ii) ≥ 1 hydrogenated diene (co) **polymer** 1-80, and (iii) olefinic resins 10-90% (A + B + C = 100 parts) and (iv) 0-200 parts (based on i) mineral oils; components i, iii, and iv are heated and kneaded in the presence of crosslinking agents used for rubber vulcanization; ii are ≥ 1 selected from ii-1, ii-2, and iii-3, all of which are hydrogenated (and modified) block copolymers or block copolymers whose repeating units are extended or branched via coupling agent residues, with number average mol. weight 5 + 104-70 + 104, and hydrogenated to $\geq 80\%$ saturate of C:C in **conjugated** diene (CD); ii-1 are shown as A-B, A-B-C, or A-B-A [A = vinyl aromatic compound (VA) **polymer** blocks; B = **conjugated** diene (CD) **polymer** blocks or VA-CD random copolymer **polymer** blocks; C = terblock **polymers** comprising CD and VA which increase gradually; VA contents in A ≥ 3 , total VA contents in A and C 3-50, and CD content in B $> 20\%$ (based on all component monomers, resp.); ii-2 contain D, E, and/or F [D = VA-based **polymer** block; E = CD-based **polymer** block with 1,2-vinyl bond 25-95%; F = polybutadiene **polymer** block with 1,2-vinyl bond $< 25\%$; content ratio D 5-60, E 30-90, and F 5-60% (D + E + F = 100%)]; and ii-3 are shown as G-H-G or G-H [G = polybutadiene block with 1,2-vinyl bond $\leq 25\%$; H = CD block or VA-CD block with vinyl bond content in CD $> 25\%$]. Thus, a composition comprising Bu 1268 (isobutylene-isoprene copolymer rubber) 30, block copolymer of polystyrene and hydrogenated butadiene-styrene copolymer 20, BC 5C 50, Tackirol 250 (brominated **phenol**-formaldehyde crosslinking agent) 2, stearic acid 0.3, and ZnO 1.8 parts was kneaded at 120-170°, and **crosslinked**.

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1991:102929 CAPLUS

DOCUMENT NUMBER: 114:102929

TITLE: Conjugated ionic polyacetylenes. 2. A new polymerization method for substituted acetylenes

AUTHOR(S): Subramanyam, Sundar; Blumstein, Alexandre

CORPORATE SOURCE: Dep. Chem., Univ. Lowell, Lowell, MA, 01854, USA

SOURCE: Makromolekulare Chemie, Rapid Communications (1991),
12(1), 23-30
CODEN: MCRCD4; ISSN: 0173-2803
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Extensively **conjugated**, quaternized, soluble polyacetylenes were prepared from ethynylpyridines and alkyl halides or methosulfates, which formed quaternary ammonium salts which spontaneously polymerized PhC.tplbond.CBr with pyridine gave a **conjugated polymer** with alternating Ph and pyridinio groups. 1,4-Bis(4-pyridyl)-1,3-butadiyne with Cl₂H₂5Br gave a **crosslinked** product, as did nonamethylene bis(methanesulfonate) with 1,2-bis(4-pyridyl)acetylene. **Iodine**-doped (<200%) **polymers** had a.c. elec. conductivity (1.4-2.2) + 10⁻⁴ S/cm at room temperature

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1969:68969 CAPLUS
DOCUMENT NUMBER: 70:68969
TITLE: Adhesive composition containing crosslinked polyisobutylene
INVENTOR(S): Hawkins, Colin W.
PATENT ASSIGNEE(S): Polymer Corp. Ltd.
SOURCE: Can., 11 pp.
CODEN: CAXXA4
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 802964		19681231	CA	19670419
DE 1769170			DE	
FR 1565028			FR	
GB 1196087			GB	
US 3549574		19700000	US	

AB A sprayable adhesive composition comprising a dispersion in a volatile liquid was prepared from a mixture of a **crosslinked** copolymer of iso-butylene (I) with divinylbenzene (II) as the **crosslinked** monomer, an elastomeric **polymer** of a **conjugated** diolefin, and a tackifying resin. Thus, an isobutylene copolymer, prepared by copolymerizing a mixture of I 100, isoprene 3, and II 3 parts in CH₂Cl₂ in the presence of AlCl₃ catalyst, was milled 40 min. at room temperature and 25 g. of the **polymer** was uniformly dispersed in toluene. To this dispersion was added a butadiene-styrene copolymer 47, wood rosin (III) 94, and 2,2'-methylenebis(4-methyl-6-tert-butylphenol) 2 g. When the adhesive was used to bond cotton duck strips, a force of 16.3 kg. was required to peel off the strips. A cement composition was also prepared using SP-103 resin (an alkyl-phenol-HCHO resin) in place of III. The cements were low-viscosity dispersions which, when atomized, form a spray practically free of fibrils.

L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1968:115355 CAPLUS
DOCUMENT NUMBER: 68:115355
TITLE: Influence of polymeric additions with conjugated double bonds on the physical and mechanical properties and degradation of phenol-formaldehyde resins
AUTHOR(S): Berlin, A. A.; Aseeva, R. M.; Al'manbetov, K.
SOURCE: Plaste und Kautschuk (1968), 15(2), 91-5
CODEN: PLKAAM; ISSN: 0048-4350

DOCUMENT TYPE: Journal
LANGUAGE: German

AB The effect of adding **polymers** with **conjugated** double bonds, such as poly(phenylacetylene) (I) or products from I and anthracene, on the degradation and specific impact and static flexural strength of **phenol-HCHO** resins (II), hardened with hexamethylenetetramine, was investigated. The characteristic change of the mech. values was related to the concentration of **polymer** with double bonds, varied from 0.2-5%, and showed a strength increase with an increase in **polymers** containing double bonds. It was shown, with the aid of an electron microscope, that the modifications were related to a structural change in the **crosslinked polymer**.
Addns. of small amts. of **conjugated polymers** to II inhibited the thermal and oxidative thermal degradation.

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1968:69442 CAPLUS
DOCUMENT NUMBER: 68:69442
TITLE: Synthesis and some properties of polymers based on iodophenylacetylene
AUTHOR(S): Cherkashin, M. I.; Kisilitsa, P. P.; Sel'skaya, O. G.; Berlin, A. A.
CORPORATE SOURCE: Inst. Khim. Fiz., Moscow, USSR
SOURCE: Vysokomolekulyarnye Soedineniya, Seriya A (1968), 10(1), 196-206
CODEN: VYSAAF; ISSN: 0507-5475
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB Heating PhC.tplbond.CI to 150° gave good yields, of oligomeric poly(iodophenylacetylene) (I) of mol. weight <2340, soluble in most organic solvents. Similarly, polymerization of PhC.tplbond.CI over Et3Al-TiCl3, Et3Al-TiCl4, or Et3Al-TiCl3-pyridine at 50-70° gave I of mol. weight 1130-1540. Heating I to 400° split off **iodine** and gave insol. **crosslinked polymers**. Above 450° I decomposed by losing 1st **iodine**, then H; at 800° only C (95.64%) and H (1.28%) remained. Curves give weight loss with temperature in the
air and in vacuo. Elec. conductivity (σ) of I was 5-6 times that of poly(phenylacetylene). The following changes in σ and elec. conductivity activation energy (E) were recorded (temperature, σ at 300° K. in ohm-1 cm.-1, and E in ev. given): 400°, 3:2 + 10-10, 0.21; 600°, 3.9 + 10-3, 0.17; 800°, 2.0, 0.07. An E.P.R. signal was at a maximum (1.7 + 1020 spins/g.) at 600°. Ir spectroscopy of I showed that they were linear; some segments were **conjugated**. In catalytic polymerization formation of dimer PhC.tplbond.CCI:CIPh was observed. The dimer is a major polymerization intermediate; splitting off **iodine** from oligomer mols. and their union gives I.

L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1967:116099 CAPLUS
DOCUMENT NUMBER: 66:116099
TITLE: Reactions of butyllithium with polymers. II. Lithiation of diene polymers
AUTHOR(S): Harada, Hiroshi; Shiina, Kyo; Minoura, Yuji
CORPORATE SOURCE: City Univ., Osaka, Japan
SOURCE: Kogyo Kagaku Zasshi (1966), 69(11), 2194-9
CODEN: KGKZA7; ISSN: 0368-5462

DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB cf. CA 66, 86038r. Squalene (I) was lithiated as a model compound of **conjugated diene polymers** by equimolar amount (to the

double bonds) of BuLi (II) in the presence of the same amount of (CH₂NMe₂)₂ (III) for 60 min. at 80°. The reaction product was treated with water to give a compound, the ir spectrum, mol. weight, and degree of unsatn. of which were very close to those of I. This fact means that the lithiation proceeded through allylic H-Li exchange. The lithiated I treated with CO₂ showed ir absorption bands of a CO₂H group. cis-1,4-Polybutadiene (IV) (0.16-0.78 mole/l.) was lithiated with 0.26 mole/l. II and the same concentration of III for 5, 10, 20, and 30 min. at 80° followed by carboxylation. The conversion of the reaction was calculated from the CO₂H introduced. The carboxylated IV had absorption bands of a CO₂H group. The **polymer** containing 7.2% CO₂H was soluble in C₆H₆, and that containing >12% CO₂H was insol. in C₆H₆ and soluble in aqueous alkaline solution

The initial reaction rate (R₀) was proportional to the initial concentration of IV up to 11% conversion, then the lithiated IV began to precipitate The relation

between R₀ and the initial concentration of II was studied at the concentration of 0.074-0.52 mole/l. to give the equation: $R = k [IV] [II]^{0.5}$, where R is the rate of the reaction and k is the constant, which depends on the III/II ratio. The activation energies of the lithiation reactions were 6.6 and 8.4 kcal./mole for IV and for cis-1,4-polyisoprene (V), resp. at 50-95°. The degree of unsatn. of the hydrolysis production (VI) of the lithiated V (determined by ICl addition) did not change with the change in the

reaction time. The viscosity [η] of VI determined in PhMe at 30° decreased from 4.1 to 0.55 dl./g. Lithiated IV reacted with Michler's ketone gave a **polymer** (VII), which was oxidized with **iodine** to give a **polymer** (VIII) having a malachite green structure. VII had 0.256 mole Michler's ketone in the monomeric unit. VII was soluble in CHCl₃ and C₆H₆. VIII was not soluble in C₆H₆, and was soluble

in a mixture of tetrahydrofuran and MeOH. Lithiated IV was subjected to the reaction with Me₃SiCl and Ph₃SiCl to give the corresponding silanes. The lithiated IV (0.01 mole) was treated with 0.015 mole BzH in 20 ml. C₆H₆ to give a brown and tacky mass (IX). The lithiated IV (0.01 mole) was treated with 0.015 mole pyridine in 20 ml. C₆H₆ to give a pale-yellow **crosslinked** product insol. in organic solvents and containing 2.3% N.

=> s antimicrobial polymer

49927 ANTIMICROBIAL
3406 ANTIMICROBIALS
51060 ANTIMICROBIAL
(ANTIMICROBIAL OR ANTIMICROBIALS)
938579 POLYMER
787154 POLYMERS
1277324 POLYMER
(POLYMER OR POLYMERS)
L5 168 ANTIMICROBIAL POLYMER
(ANTIMICROBIAL(W) POLYMER)

=> s antimicrobial (2a) polymer (p) crosslinked

49927 ANTIMICROBIAL
3406 ANTIMICROBIALS
51060 ANTIMICROBIAL
(ANTIMICROBIAL OR ANTIMICROBIALS)
938579 POLYMER
787154 POLYMERS
1277324 POLYMER
(POLYMER OR POLYMERS)
88451 CROSSLINKED

L6 8 ANTIMICROBIAL (2A) POLYMER (P) CROSSLINKED

=> d l6 ibib 1-

YOU HAVE REQUESTED DATA FROM 8 ANSWERS - CONTINUE? Y/(N):y

L6 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:633791 CAPLUS

DOCUMENT NUMBER: 139:180873

TITLE: **Antimicrobial crosslinked
polymer** composition for surface treatment

INVENTOR(S): McDonald, William F.; Huang, Zhi-Heng; Wright, Stacy C.

PATENT ASSIGNEE(S): Michigan Biotechnology Institute, USA

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003066721	A1	20030814	WO 2003-US3102	20030203

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003157193	A1	20030821	US 2002-68054	20020205
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PRIORITY APPLN. INFO.: US 2002-68054 A 20020205

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:118632 CAPLUS

DOCUMENT NUMBER: 138:155134

TITLE: Antimicrobial polymer and rendering the surface of a substrate antimicrobial

INVENTOR(S): McDonald, William F.; Wright, Stacy C.; Taylor, Andrew C.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 15 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003032765	A1	20030213	US 2001-850324	20010507
US 2003220467	A9	20031127		
US 6399714	B1	20020604	US 2000-671784	20000927
US 6495657	B1	20021217	US 2000-698619	20001027
WO 2003084322	A2	20031016	WO 2002-US14304	20020506
WO 2003084322	A3	20031224		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-671784 A2 20000927
 US 2000-698619 A2 20001027
 US 2001-850324 A 20010507

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2002:736719 CAPLUS
 DOCUMENT NUMBER: 137:253035
 TITLE: Antimicrobial compositions containing quaternary
 ammonium compounds
 INVENTOR(S): Staats, Victor J.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 4 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002136768	A1	20020926	US 2001-10111	20011113
PRIORITY APPLN. INFO.:			US 2000-248381P	P 20001114

L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2000:21582 CAPLUS
 DOCUMENT NUMBER: 132:83706
 TITLE: Quaternary ammonium polymers as antimicrobial agents
 and water absorbents
 INVENTOR(S): Harada, Nobuyuki; Motono, Yoshihiro; Matsuyama,
 Hirofumi
 PATENT ASSIGNEE(S): Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000007505	A2	20000111	JP 1998-172356	19980619
PRIORITY APPLN. INFO.:			JP 1998-172356	19980619

L6 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1999:518651 CAPLUS
 DOCUMENT NUMBER: 131:154748
 TITLE: Antimicrobial polymer particles, their manufacture,
 and resin compositions
 INVENTOR(S): Yamaguchi, Chiharu; Matsui, Kyuji; Zaima, Hiroaki
 PATENT ASSIGNEE(S): Osaka Gas Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11222402	A2	19990817	JP 1998-23425	19980204
PRIORITY APPLN. INFO.:			JP 1998-23425	19980204

L6 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:816466 CAPLUS
DOCUMENT NUMBER: 130:67569
TITLE: Antimicrobial polymer laminates with matte surface
INVENTOR(S): Nishikawa, Yoshiki
PATENT ASSIGNEE(S): Mitsubishi Plastics Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10337814	A2	19981222	JP 1997-148846	19970606
PRIORITY APPLN. INFO.:			JP 1997-148846	19970606

L6 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:719077 CAPLUS
DOCUMENT NUMBER: 129:347325
TITLE: Methods for functionalizing and coating substrates and devices made according to the methods
INVENTOR(S): Yan, Mingdi; Keana, John F. W.; Karapetrov, Goran; Sevrain, Christopher J. P.; Wybourne, Martin N.
PATENT ASSIGNEE(S): The State of Oregon Acting by and through the State Board of Higher Education, USA
SOURCE: U.S., 43 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5830539	A	19981103	US 1995-565199	19951117
PRIORITY APPLN. INFO.:			US 1995-565199	19951117
REFERENCE COUNT:	41	THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L6 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:325879 CAPLUS
DOCUMENT NUMBER: 120:325879
TITLE: **Crosslinked urethane acrylate polymer particle-containing antimicrobial coatings**
INVENTOR(S): Honda, Tomoji; Kaetsu, Isao
PATENT ASSIGNEE(S): Tokyo Keikaku Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 06009919	A2	19940118	JP 1992-187442	19920623
PRIORITY APPLN. INFO.:			JP 1992-187442	19920623

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(FILE 'HOME' ENTERED AT 13:03:27 ON 05 MAR 2004)

FILE 'CAPLUS' ENTERED AT 13:03:42 ON 05 MAR 2004

L1 31848 SEA ABB=ON PLU=ON (ANTIMICROBIAL OR ANTIBACTERIAL OR
ANTIBIOTIC OR DISINFECTANT) (P) (PEPTIDE OR OLIGOPEPTIDE OR
POLYMER OR PROTEIN)

L2 68583 SEA ABB=ON PLU=ON (ANTIMICROBIAL OR ANTIBACTERIAL OR
ANTIBIOTIC OR DISINFECTANT OR PHENOL OR GENTIAN VOILET OR
BIGUANIDINE OR IODINE) (P) (PEPTIDE OR OLIGOPEPTIDE OR POLYMER
OR PROTEIN)

L3 227 SEA ABB=ON PLU=ON (CONJUAGTE OR CONROSSLINKED OR CROSS-LINKED
) (P) (ANTIMICROBIAL OR ANTIBACTERIAL OR ANTIBIOTIC OR
DISINFECTANT OR PHENOL OR GENTIAN VOILET OR BIGUANIDINE OR
IODINE) (P) (PEPTIDE OR OLIGOPEPTIDE OR POLYMER OR PROTEIN)

L4 7 SEA ABB=ON PLU=ON (CONJUAGTE OR CONJUGATED) (P) (CROSSLINKED
OR CROSS-LINKED) (P) (ANTIMICROBIAL OR ANTIBACTERIAL OR
ANTIBIOTIC OR DISINFECTANT OR PHENOL OR GENTIAN VOILET OR
BIGUANIDINE OR IODINE) (P) (PEPTIDE OR OLIGOPEPTIDE OR POLYMER
OR PROTEIN)
D L4 IBIB KWIC 1-

L5 168 SEA ABB=ON PLU=ON ANTIMICROBIAL POLYMER

L6 8 SEA ABB=ON PLU=ON ANTIMICROBIAL (2A) POLYMER (P) CROSSLINKED

D L6 IBIB 1-